In the Claims

Please amend the claims as follows:

1 1 (currently amended) A microstrip filter adapted to operate in a frequency range
2 between 1 and 100 GHz, said microstrip filter comprising:
3 a plurality of resonators having a longitudinal gap between each one of said
4 resonators,
5 an input portion ~~have~~ having a first transverse gap between said input portion and
6 a first one of said plurality of resonators;
7 a dielectric block having said plurality of resonators on a first side, said dielectric
8 block being at least one-twentieth of the microstrip filter's pass-band frequency's wavelength in
9 the dielectric block, and
10 an enclosure at least partially covering said plurality of resonators, said enclosure
11 operating as a pseudo waveguide having a cutoff frequency that is higher than an operating
12 frequency of said microstrip filter.

1 2. (original) The microstrip filter of claim 1, wherein said enclosure has a length
2 dimension and is open at opposite ends of its length

1 3. (previously presented) The microstrip filter of claim 1, further comprising an output
2 portion having a transverse gap between said output portion and a last one of said plurality of
3 resonators

4. (previously presented) The microstrip filter of claim 3, wherein said enclosure is open near at least one of said input portion and said output portion -

5. (previously presented) The microstrip filter of claim 4, wherein said enclosure substantially encloses said plurality of resonators

6. (canceled)

7. (canceled).

8. (currently amended) A high frequency filter comprising:

a dielectric substrate having a top side and a bottom side, the thickness of said dielectric substrate, from said top side to said bottom side, is at least one-twentieth of the high frequency filter's pass-band frequency's wavelength in said dielectric substrate;

an input portion on said top side of said dielectric substrate,

a first resonator portion spaced transversely from said input portion and on said top side;

a second resonator portion spaced longitudinally and on said top side; and

one or more additional resonators spaced longitudinally from said second resonator and each other respectively, said one or more additional resonators being on said top side;

an output portion on said top side of said dielectric substrate, said output portion being spaced transversely from a last one of said one or more additional resonators,

an open ended enclosure over at least said first resonator, said second resonator, and said one or more additional resonators, said open ended enclosure adapted to operate as a pseudo-wave guide having a cut off frequency above an operating frequency of said high frequency filter.

9. (canceled)

10. (previously presented) The high frequency filter of claim 8, further comprising a ground plane on said bottom side of said dielectric substrate.

11 (canceled)

12 (previously presented) The high frequency filter of claim 11, wherein said enclosure is open adjacent to said input portion.

13. (previously presented) The high frequency filter of claim 12, wherein said enclosure comprises a conductive material on a surface of said enclosure.

14. (original) The high frequency filter of claim 8, further comprising a carrier plate, said dielectric substrate being attached to said carrier plate

15. (canceled)

16. (original) The high frequency filter of claim 8, wherein said filter is at least one of a band-pass, low pass and a high pass filter.

17. (original) The high frequency filter of claim 8, wherein said filter is at least one of a strip line filter and a microstrip filter.

18. (original) The high frequency filter of claim 8, wherein at least one of said first, second and third resonators have a variation in their width over their length

19. (original) The high frequency filter of claim 8, wherein said high frequency filter is adapted to operate at frequencies substantially between 1 GHz and 100 GHz

20. (currently amended) An electronic system that is adapted to process high frequency signals comprising

a high frequency filter, said high frequency filter comprising.

a dielectric substrate having a top surface and a bottom surface, the thickness of said dielectric substrate, from said top surface to said bottom surface, being at least one-twentieth of the high frequency filter's pass-band frequency's wavelength in said dielectric substrate;

a plurality of resonators spaced from each other on said top surface and adapted to be longitudinally coupled;

an input portion spaced from a first one of said plurality of resonators, said input portion adapted to transversely couple with said first one of said plurality of resonators,

an output portion spaced from a last one of said plurality of resonators, said output portion adapted to transversely couple with said last one of said plurality of resonators; and

an enclosure substantially covering said plurality of resonators, said enclosure adapted to operate as a pseudo-wave guide having a cut off frequency above the operating frequency of said high frequency filter

21. (original) The electronic system of claim 20 wherein said enclosure is open-ended substantially near at least one of said input portion and said output portion.

22. (currently amended) A high frequency filter comprising:

a dielectric substrate having a top surface and a bottom surface, the thickness of said dielectric substrate, from said top surface to said bottom surface, being at least one-twentieth of the high frequency filter's pass-band frequency's wavelength in said dielectric substrate,

a plurality of resonators spaced from each other on said top surface and adapted to be longitudinally coupled;

an input portion spaced from a first one of said plurality of resonators, said input portion adapted to transversely couple with said first one of said plurality of resonators,

an output portion spaced from a last one of said plurality of resonators, said output portion adapted to transversely couple with said last one of said plurality of resonators; and

an enclosure substantially covering said plurality of resonators, said enclosure adapted to operate as a pseudo-wave guide having a cut off frequency above the operating frequency of said high frequency filter.

23 (new) A microstrip filter adapted to operate in a frequency range between 1 and 100 GHz, said microstrip filter comprising:

a plurality of resonators having at least one of a longitudinal gap and a transverse gap between each one of said plurality of resonators,

a dielectric block having said plurality of resonators on a first side, said dielectric block having a thickness of at least one-twentieth of the microstrip filter's pass-band frequency's wavelength in the dielectric block; and

a covering that at least partially covers said plurality of resonators, said covering adapted to operate as a pseudo waveguide having a cutoff frequency that is higher than an operating frequency of said microstrip filter

24 (new) The microstrip filter of claim 23, wherein said microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

25 (new) The microstrip filter of claim 24, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils

26. (new) The microstrip filter of claim 23, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mil and said microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

27. (new) A microstrip filter comprising:

a plurality of capacitively coupled resonators;

a dielectric block having said plurality of capacitively coupled resonators on at least a first side of said dielectric block, said dielectric block having a thickness of at least one-twentieth of the microstrip filter's pass-band frequency's wavelength in the dielectric block; and

a covering over at least a portion of said plurality of capacitively coupled resonators, said covering adapted to function as a pseudo waveguide having a cutoff frequency that is higher than an intended operating frequency of said microstrip filter, said intended operating frequency being a selected frequency range between 1 GHz and 100 GHz.

28 (new) The microstrip filter of claim 27, wherein said microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

29 (new) The microstrip filter of claim 28, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils.

30. (new) The microstrip filter of claim 27, wherein said dielectric block has a thickness of between 200 mils and 15 mils and the microstrip filter is adapted to operate within a a frequency range of 1 GHz to 25 GHz

31. (new) The microstrip filter of claim 1, wherein said microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

32. (new) The microstrip filter of claim 31, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils.

33. (new) The microstrip filter of claim 1, wherein said dielectric block has a thickness of between 200 mils and 15 mils and the microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz

34. (new) The high frequency filter of claim 8, wherein said high frequency filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

35. (new) The high frequency filter of claim 34, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils.

36 (new) The high frequency filter of claim 8, wherein said dielectric block has a thickness of between 200 mils and 15 mils and the microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

37. (new) The electronic system of claim 20, wherein said high frequency filter is adapted to operate in a frequency range between 1 GHz and 25 GHz

38 (new) The electronic system of claim 37, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils.

39. (new) The electronic system of claim 20, wherein said dielectric block has a thickness of between 200 mils and 15 mils and the microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

40 (new) The high frequency filter of claim 22, wherein said high frequency filter is adapted to operate in a frequency range between 1 GHz and 25 GHz.

41. (new) The high frequency filter of claim 40, wherein said dielectric block has a thickness ranging from about 200 mils to about 15 mils

42 (new) The high frequency filter of claim 22, wherein said dielectric block has a thickness of between 200 mils and 15 mils and the microstrip filter is adapted to operate in a frequency range between 1 GHz and 25 GHz